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| 09/667,408 | 09/21/2000 | Charles E. Roos | A32398-PCT-USA-066355.011 | 8750 |
| 7590 | | 01/23/2008 | | |
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| | | | EXAMINER | |
| | | | BORISOV, IGOR N | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/667,408

Applicant(s)

ROOS, CHARLES E.

Examiner

Igor N. Borissov

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/08/2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 30-59 is/are pending in the application.
- 4a) Of the above claim(s) 34,35,38 and 43-58 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 30-33,36,37,39-42 and 59 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/08/2007 has been entered.

Response to Amendment

Amendment received on 11/08/2007 is acknowledged and entered. Claims 1-29 have been canceled. Claims 34, 35, 38, 43-58 have been withdrawn. Claims 30, 33, 40, 42 and 59 have been amended. Claims 30-59 are currently pending in the application.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 30-33 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 30 includes the following phrase in step d) line two: "communicate said data". There is insufficient antecedent basis for this limitation in the claim.

Claim 31 includes the following phrase in preamble: "comprising the means, wherein", which is improper "means plus function format".

Claim 32 includes the following phrase in line three: "with said interfaces located within said utility user's household". There is insufficient antecedent basis for this limitation in the claim.

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Claim 33 recites the limitation "said communications" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 36 includes the following phrase in line three: "by means of at least one transmission media...", which is improper "means plus function format".

Claim 37 includes the following phrase in line two: "the electric utility". There is insufficient antecedent basis for this limitation in the claim.

Claim 39 includes the following phrase in line two: "or other means", which is improper "means plus function format". Furthermore, the word "or" makes the claim indefinite, because it is not clear what type of a device is utilized to identify the location of the data port. Furthermore, the claim appears to be not finished, because it misses "." (period) at the end and, thereby, considered to be indefinite.

Claim 31 includes the following phrase in preamble: "comprising the means, wherein", which is improper "means plus function format".

Claim 40 recites the following limitations:

in preamble: "said data port and thermostat adjustments in said utility user's household";

step a): "said electric utility";

step c): "said utility";

There is insufficient antecedent basis for this limitation in the claim. Furthermore, the phrases "said electric utility" and "said utility" are used intermittently, which is confusing.

step e): "to measure effectiveness of said method", which is confusing. It is not clear what method steps are considered under the term "said method".

step f): "the said environmental and said financial benefits". There is insufficient antecedent basis for this limitation in the claim.

Furthermore, the phrases "utility user" and "utility customer" are used intermittently, which is confusing.

Claim 41. The word "or" in line four makes the claim indefinite, because it is not clear what type of the data port is, actually, considered.

Claim 42 recites the following limitations:

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in preamble: "said multifunction data port apparatus"; "said multiple interfaces"; "said digital services network"; "said intranet"; "said power management"; "said communication", and "said data port";

step d): "the said thermostat";

step e): "said alert".

There is insufficient antecedent basis for this limitation in the claim.

Furthermore, the phrases "utility user's premises" and "utility users households" are used intermittently, which is confusing.

Furthermore, step d) requires adjusting a plurality of thermostats at plurality of households, while previous step require only one data port and considers only one household, which is confusing.

Furthermore, step d) requires adjusting step, which appears does not have any relationship with the last step and the rest of the method.

Claim 59 recites the following limitations:

step b): "said devices" in line 4; "said data and said information" in line 5.

Also, the use of word "or" in step b) makes the claim indefinite.

Furthermore, the claim is considered to be indefinite because the step a) ends with "." (period), and it is not clear whether the step b) should be considered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 30-33, 36, 37, 39, 41 and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tracy et al. (US 6,150,955) in view of McEachern (US 5,530,738) and further in view of McNamara et al. (US 5,528,507).

Tracy et al. (Tracy) teaches an apparatus for transmitting data via a digital network, comprising:

Claim 30,

a utility meter interface configured to communicate with a meter for measuring the utility usage in said household of a utility delivered to said household (C. 3, L. 64-67);

a network interface configured to communicate with said digital network (C. 4, L. 7-33);

a household interface configured to communicate with household devices of said utility user (C. 7, L. 16-44); furthermore, note: "communicating voice/data including caller's identification and billing information over said digital network", thereby indicating providing services over said digital network (C. 5, L. 37-43);

a computer disposed within said data port configured to store and process data and other communications from said interfaces (C. 7, L. 16-17). As per real-time communication per se, it is old and well known.

Tracy does not explicitly teach that said network is the Internet.

Official Notice is taken that it is old and well known that the Internet is a largest existing network. Also, it is old and well known to provide services over the Internet.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Tracy to include that said network includes the Internet, because it would advantageously allow to save money by avoiding building a dedicated network.

Also, Tracy does not explicitly teach that said utility meter interface is configured to measure Voltage, harmonics, current, and to communicate at broadband rates.

McEachern teaches an electronic power measuring instrument adapted to measure Voltage, current and harmonics (C. 3, L. 51-61; C. 8, L. 46).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Tracy to include that said utility meter interface is configured to measure Voltage and harmonics, as disclosed in McEachern, because

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obtaining said data in relation to historical numbers and threshold values would advantageously allow to identify fault data, as specifically stated in McEachern.

McNamara et al. (McNamara) teaches an intelligent utility measuring device which is interfaced with a high-speed backbone network via a broad band interface (fiber/optical cable), and which includes a customer's home monitoring and control network which routes data between the customer's home (including utility meters and other household devices) and gateways, thereby providing for video, voice and data communications (Figs. 2, 4; C. 2, L. 18-23; C. 3, L. 33, 57-60).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Tracy and McEachern to include that said apparatus comprises a broad band interface, as disclosed in McNamara, because it would advantageously allow to provide bi-directional real-time communication with large numbers of residential and commercial customers, and provide channels for data services, as specifically disclosed in McNamara (C. 2, L. 9-14). Furthermore, because this is a case where the improvements are no more than the predictable use of prior art elements according to their established functions, no further analysis is required by the Examiner. *KSR*, 127 S.Ct. at 1740, 82 USPQ2d at 1396. Accordingly, in such case, Supreme Court Decision in *KSR International Co. v. Teleflex Inc.* (KSR, 82 USPQ2d at 1396) forecloses the argument that a specific teaching, suggestion, or motivation is required to support a finding of obviousness. See the recent Board decision *Ex arte Smith*, --USPQ2d--, slip op. at 20, (Bd. Pat. App. & Interf. June 25, 2007).

Claim 31. McNamara teaches an intelligent utility measuring device which is interfaced with a high-speed backbone network via a broad band interface (fiber/optical cable), and which includes a customer's home monitoring and control network which routes data between the customer's home (including utility meters and other household devices) and gateways, thereby providing for video, voice and data communications (Figs. 2, 4; C. 2, L. 18-23; C. 3, L. 33, 57-60). The motivation to combine the references would be to advantageously allow to avoid the centralized routing and handling facility,

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and provide simultaneous two-way communication with an entire service area population, as specifically disclosed in McNamara (C. 2, L. 2-3, 7-8).

Claim 32. See reasoning applied to claim 31.

Claim 33. Tracy teaches said apparatus adapted to scramble (encrypt) data transmitted over said network (C. 6, L. 37-39).

Claim 36. Tracy teaches said apparatus adapted to communicate said data wirelessly (C. 4, L. 24-25).

Claim 37. Tracy teaches said apparatus including means for power back-up in case of power outage (C. 6, L. 62-64).

Claim 39.

Tracy teaches all the limitations of claim 39, including means for power back-up in case of power outage (C. 6, L. 62-64), except specifically teaching means to identify the location of said multifunction dataport, and that said computer is configured to communicate said location information of said dataport when said power outage is detected.

McNamara teaches said intelligent utility measuring device (IUU), wherein each IUU is associated with a particular customer's home and has individual unique physical unit address which allows each IUU directly communicate with a network manager (C. 5, L. 1-10), thereby indicating ability to communicate from a specific IUU any pertinent information associated with said specific IUU disposed at the particular location.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Tracy and McEachern to include means to identify the location of said multifunction dataport, and that said computer is configured to communicate said location information of said dataport when said power outage is detected, as suggested in McNamara, because it would advantageously to

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instantaneously detect the faulty unit thereby avoiding financial losses associated with loss of metering data.

Claim 41. Tracy teaches said apparatus including a sealed housing, said apparatus is adapted to detect a physical intrusion and send a security breach signal to a utility provider (C. 7, L. 10-15; C. 8, L. 55-56, 65-67; C. 9, L. 1-3).

Claim 59 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tracy et al. (US 6,150,955) in view of McEachern (US 5,530,738) further in view of King et al. (US 5,745,114) and further in view of McNamara et al. (US 5,528,507).

Tracy et al. (Tracy) teaches an apparatus for transmitting data via a digital network, comprising:

Claim 59,

a utility meter interface configured to communicate with a meter for measuring the utility usage in said household of a utility delivered to said household (C. 3, L. 64-67);

a network interface configured to communicate with said digital network (C. 4, L. 7-33);

a household interface configured to communicate with household devices of said utility user (C. 7, L. 16-44); furthermore, note: "communicating voice/data including caller's identification and billing information over said digital network", thereby indicating providing services over said digital network (C. 5, L. 37-43

a computer disposed within said data port configured to store and process data and other communications from said interfaces (C. 7, L. 16-17).

Tracy does not explicitly teach that said network is the Internet.

Official Notice is taken that it is old and well known that the Internet is a largest existing network. Also, it is old and well known to provide services over the Internet.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Tracy to include that said network includes

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the Internet, because it would advantageously allow to save money by avoiding building a dedicated network.

Also, Tracy does not explicitly teach that said utility meter interface is configured to measure Voltage, harmonics, peak demand, power factor and to communicate at broadband rates.

McEachern teaches an electronic power measuring instrument adapted to measure peak demand, Voltage, and harmonics (C. 3, L. 51-61; C. 8, L. 40-41).

King et al. (King) teaches an electronic power measuring instrument adapted to measure Voltage, harmonics, and power factor (C. 1, L. 25-30; C. 5, L. 35-65).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Tracy to include that said utility meter interface is configured to measure peak demand, Voltage and harmonics, as disclosed in McEachern, and power factor, as disclosed in King, because obtaining said data in relation to historical numbers and threshold values would advantageously allow to identify fault data, as specifically stated in McEachern and King.

McNamara et al. (McNamara) teaches an intelligent utility measuring device which is interfaced with a high-speed backbone network via a broad band interface (fiber/optical cable), and which includes a customer's home monitoring and control network which routes data between the customer's home (including utility meters and other household devices) and gateways, thereby providing for video, voice and data communications (Figs. 2, 4; C. 2, L. 18-23; C. 3, L. 33, 57-60).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Tracy, McEachern and King to include that said apparatus comprises a broad band interface, as disclosed in McNamara, because it would advantageously allow to provide bi-directional real-time communication with large numbers of residential and commercial customers, and provide channels for data services, as specifically disclosed in McNamara (C. 2, L. 9-14). Furthermore, because this is a case where the improvements are no more than the predictable use of prior art elements according to their established functions, no further analysis is required by the Examiner. *KSR*, 127 S.Ct. at 1740, 82 USPQ2d at 1396. Accordingly, in such case,

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Supreme Court Decision in *KSR International Co. v. Teleflex Inc.* (KSR, 82 USPQ2d at 1396) forecloses the argument that a specific teaching, suggestion, or motivation is required to support a finding of obviousness. See the recent Board decision *Ex arte Smith*, --USPQ2d--, slip op. at 20, (Bd. Pat. App. & Interf. June 25, 2007).

Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brown, Jr. et al. (US 5,544,036) in view of Berkeley et al. (US 5,816,491).

Claim 40. Brown, Jr. et al. (Brown) teaches a method for utility management at utility user's household, wherein the power utility controls remotely power usage at the user's household; and wherein the power utility installs a power usage control device (customer computer) at the utility user's premises so that power usage at the premises can be controlled both remotely by the power utility and manually in said household so that the utility user can override the utility settings any time; and wherein the power utility modifies power appliances settings at the utility user's premises in times of peak power demand while the utility user is aware of it (indicates amounts agreed by the utility user); and wherein power usage data is monitored and transmitted to the power utility and the utility user, wherein decreasing power demand suggests incurring reduced power rates (C. 1, L. 10-15, 56-67; C. 3, L. 37-40; C. 9, L. 61-67; C. 10, L. 65-67).

Brown does not explicitly teach presenting the utility user with economic benefits of decreasing power demand.

Berkeley et al. (Berkeley) teaches a method for utility management at utility user's household, wherein a power utility installs a power usage control device and thermostat system at the utility user's premises so that power usage at the premises can be controlled by thermostat adjustment (C. 4, L. 20-25; C. 13, L. 41-42), wherein the utility user receives a lower rate in exchange for limiting peak load (C. 2, L. 32-35; C. 14, L. 26); wherein said thermostat can be controlled both by the power utility and manually in said household so that the utility user can override (disable) power utility

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settings (C. 14, L. 20-24); and wherein power usage data is monitored and the benefits of using said system is demonstrated to the utility user (C. 17, L. 1-3, 58-61).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Brown to include presenting the utility user with economic benefits of decreasing power demand, as disclosed in Berkeley, because it would advantageously allow to save natural resources, reduce total and peak load, and, thereby, substitute cheaper peaking plant equipment for much more expensive base-load equipment, as specifically stated in Berkeley (C. 3, L. 35-58). Furthermore, because this is a case where the improvements are no more than the predictable use of prior art elements according to their established functions, no further analysis is required by the Examiner. *KSR*, 127 S.Ct. at 1740, 82 USPQ2d at 1396. Accordingly, in such case, Supreme Court Decision in *KSR International Co. v. Teleflex Inc.* (KSR, 82 USPQ2d at 1396) forecloses the argument that a specific teaching, suggestion, or motivation is required to support a finding of obviousness. See the recent Board decision *Ex arte Smith*, --USPQ2d--, slip op. at 20, (Bd. Pat. App. & Interf. June 25, 2007).

Response to Arguments

Applicant's arguments filed 11/08/2007 have been fully considered but they are not persuasive.

In response to applicant's argument that the Invention discloses remote load management, it is noted that the combination of Brown in view of Berkeley was applied for this feature.

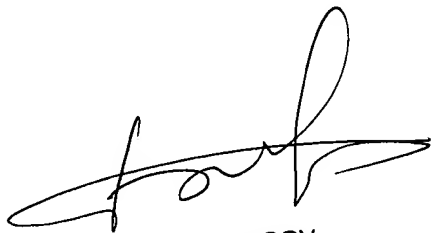
In response to applicant's argument that the Invention discloses the unique ability to charge higher fees to customers with excessive electrical noise, it is noted that said feature is not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Igor Borissov whose telephone number is 571-272-6801. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Hayes can be reached on 571-272-6708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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1/17/2008



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